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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 09/752,017   | 12/28/2000  | Fu-Jya Daniel Tsai   | 44040-228358<br>(11302-0870)  | 9060             |
| 7590 11/21/2003<br>Andrew Stover<br>Brinks Hofer Gilson Lione<br>NBC Tower - Suite 3600<br>455 North Cityfront Plaza Drive<br>Chicago, IL 60611-5599 |             |                      | EXAMINER<br>COLE, ELIZABETH M |                  |
|  |             |                      | ART UNIT<br>1771              | PAPER NUMBER     |

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                  |              |  |
|------------------------------|------------------|--------------|--|
| <b>Office Action Summary</b> | Application No.  | Applicant(s) |  |
|                              | 09/752,017       | TSAI ET AL.  |  |
|                              | Examiner         | Art Unit     |  |
|                              | Elizabeth M Cole | 1771         |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-8, 12-13, 15-20, 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-8, 12-13, 15-20, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al, U.S. Patent No. 5,407,979 in view of JP 11-048436, ( machine translation provided) and Wu et al, U.S. Patent No. 5,851,937.

Wu et al '979 discloses a biodegradable, breathable film material. The film material may be stretched. See col. 2, lines 38-61. Wu et al differs from the claimed invention because Wu et al does not teach the particularly claimed breathable film material. Wu et al '937 teaches that both polycaprolactone such as taught by '979 as well as other biodegradable polymers such as polylactides, and polyesters such polyhydroxybutyrate and polyhydroxyvalerate may be formed into biodegradable and comonomer film forming polymers. See col. 2, lines 35-52. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the polymers disclosed in Wu '937 to form the film of Wu '979 because Wu '937 teaches that the polymers were art recognized equivalents. Wu et al '979 differs from the claimed invention because Wu et al '979 does not disclose the claimed water vapor transmission rate, because Wu et al '979 does not teach employing a filler material in the film layer and because Wu et al '979 does not teach laminating the film to a biodegradable nonwoven. With regard to the water vapor transmission rate, since Wu

et al '979 teaches that the breathability of the film is due to the stretching of the film, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the breathability of the film by selecting the degree of stretching of the laminate through the process of routine experimentation. With regard to the presence of the filler in the film layer, JP 11-048436 teaches that filler materials may be incorporated into biodegradable films which are laminated to secondary layers such as nonwoven fabrics and papers. JP 11-048436 teaches that the presence of the filler enhances the strength of the film without interfering with the ability of the film to biodegrade. JP 11-048436 also teaches that certain fillers will both enhance strength and enhance the biodegradability of the film. See paragraphs 5 -6 and 21 of "Detailed Description". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated fillers such as those taught by JP 11-048436 into the film of Wu et al '979. One of ordinary skill in the art would have been motivated to incorporate fillers into the film of Wu et al '979 by the expectation that this would enhance both the strength of the film and the biodegradability of the film as taught by JP 11-048436. JP 11-048436 also teaches that biodegradable films may be laminated to biodegradable nonwoven fabrics. See paragraph 0022 of the translation. Therefore, it would have been obvious to one of ordinary skill in the art to have laminated the film of Wu et al '979 to a nonwoven fabric as taught by JP 11-048436. One of ordinary skill in the art would have been motivated to laminate the film of Wu '979 to a biodegradable nonwoven as taught by JP 11-048436 in order to enhance the strength of the biodegradable film. Although JP 11-048546 teaches employing a

biodegradable nonwoven, it does not teach the particularly claimed nonwoven. Wu '937 teaches that biodegradable film/fabric laminates may be formed wherein the fabric comprises a nonwoven fabric formed from polylactide polymers. See col. 2, lines 54-62. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the nonwoven fabric of JP '436 so that it comprised a polylactide polymer as taught by Wu '937. One of ordinary skill in the art would have been motivated to employ a polylactide polymer nonwoven because Wu '937 teaches that they are particularly preferred materials for forming the biodegradable fabric portion of a biodegradable film/fabric laminate.

2. Applicant's arguments filed 9/15/03 have been fully considered but they are not persuasive. Applicant argues that Wu '979 does not teach the claimed polymers. As set forth above, since Wu '937 teaches that the claimed polymers are equivalent to the polymers taught by Wu '979, it would have been obvious to have employed the polymers of Wu '937 since they were art recognized equivalents. With regard to JP '436, Applicant argues that the reference does not teach employing the filler to achieve the claimed WVTR. However, JP'436 teaches that the filler can be included without reducing either the strength or biodegradability of the film. Additionally, Wu '979 teaches that WVTR can be controlled by the amount of stretching. Finally, with regard to Wu '937, as set forth above, Wu '979 teaches controlling the WVTR by controlling the stretching.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.**

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414. Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for all official faxes is (703) 872-9306. The fax number for unofficial faxes is (703) 305-5436.



Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c